

AD-A041 885

DEFENSE SYSTEMS MANAGEMENT COLL FORT BELVOIR VA
A NEW GENERATION OF SYSTEMS ACQUISITION MANAGERS.(U)
NOV 76 W E O'BRIEN

F/G 5/9

UNCLASSIFIED

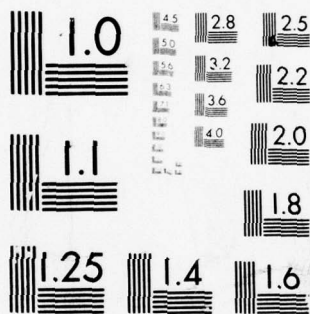
NL

| OF |
AD
A041885



END

DATE
FILMED
8-77



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

DEFENSE SYSTEMS MANAGEMENT COLLEGE

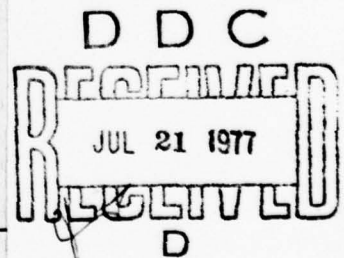


PROGRAM MANAGEMENT COURSE INDIVIDUAL STUDY PROGRAM

A NEW GENERATION OF
SYSTEMS ACQUISITION MANAGERS

STUDY PROJECT REPORT
PMC 76-2

WILLIAM E. O'BRIEN
MAJOR USAF



FORT BELVOIR, VIRGINIA 22060

DISTRIBUTION STATEMENT A

Approved for public release;
Distribution Unlimited

AD-A041885

ACCESSION for	
NTM	White Section <input checked="" type="checkbox"/>
DDG	Bull Section <input type="checkbox"/>
UNANNOUNCED	<input type="checkbox"/>
JUSTIFICATION	
BY	
DISTRIBUTION/AVAILABILITY CODES	
EXC.	AVAIL and/or SPECIAL
A	

A NEW GENERATION OF
SYSTEMS ACQUISITION MANAGERS

Study Project Report
Individual Study Program

Defense Systems Management College
Program Management Course
Class 76-2

by

WILLIAM E. O'BRIEN
MAJOR USAF

November 1976

Study Project Advisor
LT COL CARROLL RANDS, USAF

This study project report represents the views, conclusions and recommendations of the author and does not necessarily reflect the official opinion of the Defense Systems Management College or the Department of Defense.

DISTRIBUTION STATEMENT A
Approved for public release
Distribution Unlimited

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) A NEW GENERATION OF SYSTEMS ACQUISITION MANAGERS		5. TYPE OF REPORT & PERIOD COVERED Student Project Report 76-2
		6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) William E. O'Brien		8. CONTRACT OR GRANT NUMBER(s)
9. PERFORMING ORGANIZATION NAME AND ADDRESS DEFENSE SYSTEMS MANAGEMENT COLLEGE FT. BELVOIR, VA 22060		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS DEFENSE SYSTEMS MANAGEMENT COLLEGE FT. BELVOIR, VA 22060		12. REPORT DATE 76-2
		13. NUMBER OF PAGES 30
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		15. SECURITY CLASS. (of this report) UNCLASSIFIED
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report) UNLIMITED		
<div style="border: 1px solid black; padding: 5px; display: inline-block;"> DISTRIBUTION STATEMENT A Approved for public release; Distribution Unlimited </div>		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES SEE ATTACHED SHEET		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) SEE ATTACHED SHEET		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number)		

56

DEFENSE SYSTEMS MANAGEMENT COLLEGE

STUDY TITLE:

A NEW GENERATION OF SYSTEMS ACQUISITION MANAGERS

STUDY PROJECT GOALS:

To identify potential changes in the career characteristics of future Air Force systems acquisition managers as a result of Public Law 93-294 and DOD Directive 5000.23.

STUDY REPORT ABSTRACT:

The purpose of the study was to understand the impact of the Aviation Career Incentive Act and the Systems Acquisition Management Careers Directive on the career characters of future system program directors. Research of applicable reports, documents and directives concerning systems acquisition were used in the development of this report.

To place the impact of the new policies in perspective, the pertinent career characteristics of the 35 officers who are currently responsible for the management of the major Air Force weapon systems acquisition programs are presented and analyzed.

The report concludes with the formulation of resultant career characteristic changes which the author believes will occur in future generations of systems acquisition managers

KEY WORDS: MANAGER CAREER RATED

NAME, RANK, SERVICE	CLASS	DATE
William E. O'Brien, Major, USAF	PMC 76-2	November 1976

EXECUTIVE SUMMARY

This report concentrates on the impact of Public Law 93-294, "Aviation Career Incentive Act," and Department of Defense (DOD) Directive 5000.23, "Systems Acquisition Management Careers," on the career development process of future generations of Air Force systems acquisition managers. Public Law 93-294 imposed specific constraints on flight pay entitlement for rated officers while DOD Directive 5000.23 established policy for the selection, training and career development of future program managers. The impact of both actions are discussed in detail.

The eventual repercussions of these policies are placed in perspective by an examination of the pertinent career characteristics of the 35 officers who are currently responsible for the management of the major Air Force systems acquisition programs. While the results are presented of the analysis of seven career characteristics, two are of prime significance. The study found that less than 30% of the 35 Systems Program Directors (SPDs) have attended either of the Defense Systems Management College (DSMC) courses prescribed in DOD Directive 5000.23. In addition, nearly 50% of the 23 rated SPDs would have failed to achieve the basic flying requirement of Public Law 93-294.

Several resultant career characteristic changes which may occur in future generations of systems acquisition managers are then presented. They include the areas of education, training, systems acquisition experience and operational flying. A recommendation is made to augment the DSMC Program Management Course in order to make it equivalent to attendance at intermediate service school.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	i
LIST OF TABLES	iv
SECTION I - OVERVIEW	1
SECTION II - BACKGROUND	2
Introduction	2
Related Studies	3
SECTION III - CONGRESSIONAL & DOD POLICY CHANGES	7
Introduction	7
Congress	7
Department of Defense	9
SECTION IV - CHARACTERISTICS OF PROGRAM MANAGERS	13
Introduction	13
Source of Data	13
Data Analysis	14
Military Grade Level	14
Aeronautical Rating	14
Academic Education	15
Professional Military Education	16
Defense Systems Management College	16
Experience	18
Aviation Career Incentive Act	20
SECTION V - CONCLUSIONS & RECOMMENDATION	22
APPENDIX A - ASSIGNMENT SEQUENCES	24
BIBLIOGRAPHY	25

LIST OF TABLES

<u>TABLE</u>	<u>PAGE</u>
1. Military Grade Level	14
2. Aeronautical Rating vs Organization	15
3. Military Grade vs Aeronautical Rating	15
4. Academic Education	16
5. DSMC Attendance	16
6. DSMC Courses Attended	17
7. Grade Level of Attendees	18
8. Assignment Experience	19
9. ACIA Requirements	20
10. Gates Accomplished by Grade Level	21

A NEW GENERATION OF SYSTEMS ACQUISITION MANAGERS

SECTION I

OVERVIEW

This report focuses on the enactment legislated by Congress and the policy statement issued by the Department of Defense (DOD) which have had a profound impact on the career development process of Air Force systems acquisition managers. The thrust of this study is on the identification of resultant variances in the career development of rated officers who have the potential for progression to responsible positions in systems acquisition management. To place the impact of these new policies in perspective, the pertinent career characteristics of the 35 military officers who are currently responsible for the management of the major Air Force weapon systems acquisition programs are presented and analyzed. The report concludes with the formulation of resultant career characteristic changes which the author believes will occur in future generations of systems acquisition managers because of these Congressional and DOD actions.

SECTION II

BACKGROUND

INTRODUCTION

Since World War II, the United States has experienced profound social, economic and technological changes. However, the simultaneous emergence of the systems approach to management has enabled the Department of Defense to cope with the complexities and higher acquisition costs associated with modern weapon systems. Within the Air Force, the implementation of this approach has been largely vested in the Systems Program Director (SPD) who has become the individual responsible for the overall integration of the diverse activities associated with the development of a major weapon system acquisition program.

The Air Force now expends funds in excess of \$7.5 Billion annually and administers over \$50 Billion in face value contracts for weapons systems procurement.¹ As a result, tremendous attention has been focused on the need to obtain talented individuals with the desired blend of experience and education to manage the acquisition of new Air Force weapon systems. This focus of attention is not new. In examining the problem, in the summer of 1969, the Defense Science Board concluded that unless new training and assignment procedures were established, the Air Force

was not likely to find program managers of sufficient quality to assure program success under present conditions.²

Top level management within DOD has also indicated that proper career development is essential for systems acquisition managers. In a memo dated May 1970, the Honorable David Packard, then the Deputy Secretary of Defense, succinctly stated "program management in the Services will be improved only to the extent that capable people with the right kind of experience and training are designated to manage these major programs."³ The current Deputy Secretary of Defense, the Honorable William Clements, in an address at the Defense Systems Management College (DSMC)* in October 1973 stated, "program management experience itself is essential and it must be supplemented with professional education."⁴ Both individuals established the DOD policies which have impacted the most upon the career development of future program managers of a major systems program office (SPO). Their unique role will be discussed in subsequent sections of this report.

RELATED STUDIES

Several studies are considered relevant to this report. Of prime interest are two studies which document what

*Name changed from Defense Systems Management School on 1 July 1976.

experienced systems acquisition managers proposed as the proper blend of experiences and factors which they considered to contribute significantly to the career development of a successful SPD.^{5&6} Both were conducted under the auspices of the Deputy Chief of Staff/Personnel, Hq Air Force Systems Command (AFSC) and were the results of survey questionnaires. The first survey, in February 1970, obtained the judgments of 76 key general officers and SPDs. The primary conclusions of that survey were that program managers should have:

- a breadth of experience to include (in decreasing order of priority)
 - . previous SPO experience
 - . Hq USAF/Hq AFSC staff experience
 - . related operational experience
 - . research and development experience
- a baccalaureate degree in engineering with an MBA or MS in management preferred
- professional military education to include intermediate service school and senior service school
- specialized SPO training

The second study, in May 1974, obtained the comments of 136 senior officers closely connected with systems acqui-

sition management in AFSC. The study results indicated that those surveyed preferred the following primary experiences and education (in decreasing order of importance):

- assignment to a SPO
- a masters degree in management or engineering
- professional military education
- Hq USAF experience
- flying to meet gates, for rated officers
- a second SPO assignment
- research and development experience for non-rated officers

In total, the surveys emphasized the need for a diversified background and identified two factors as being essential in the career development of SPDs. The most important factor is that an officer aspiring to become an SPD must obtain experience in a SPO. There is no substitute for actual, first-hand experience. In addition, strong support existed for a masters degree in either engineering or management with both being equally preferred disciplines.

A DSMC study, conducted in May 1974, concentrated on an examination of the careers of 783 officers assigned to systems acquisition programs in AFSC.⁷ The thrust of the study was to measure the degree to which program management personnel possessed the experiences, education and training identified in the previous AFSC studies as preferable for

SPDs. To varying degrees, a good correlation was found between the desired characteristics and those possessed by the officers who were analyzed.

SECTION III
CONGRESSIONAL & DOD POLICY CHANGES

INTRODUCTION

Two recent actions, one by Congress and the other by the Deputy Secretary of Defense, have had a significant impact upon the career development process of systems acquisition program managers. They were Public Law 93-294, "Aviation Career Incentive Act," and DOD Directive 5000.23, "Systems Acquisition Management Careers." Their combined actions impose constraints, to varying degrees, upon the career progression requirements of all future program managers. Both are discussed in this section.

CONGRESS

Prior to 1974, rated officer careers were managed primarily by the number of their accumulated flying hours. Authorized flight pay was based strictly on grade and total years of service. Associated incentive pay continued during periods of non-operational flying through excusal policies or proficiency flying. However, on 24 May 1974, Congress amended the requirements relating to incentive pay for rated officers. This action occurred with the passage of Public Law 93-294, the Aviation Career Incentive Act (ACIA), which is commonly referred to as the "gate system" for flight pay entitlement. The act states in part that:

"To be entitled to continuous monthly incentive pay, an officer must perform the prescribed operational flying duties for 6 of the first 12, and 11 of the first 18, years of his aviation service. However, if an officer performs the prescribed operational flying duties for at least 9 but less than 11 of the first 18 years of his aviation service, he will be entitled to continuous monthly incentive pay for the first 22 years of his officer service.

If upon completion of either 12 or 18 years of aviation service it is determined that an officer has failed to perform the minimum prescribed operational flying duty requirements during the prescribed periods of time, his entitlement to continuous monthly incentive pay ceases. If at the completion of 12 years of aviation service entitlement to continuous monthly incentive pay ceases, entitlement to that pay may again commence at the completion of 18 years of aviation service upon completion of the minimum operational flying duty requirements."⁸

This legislation imposed specific constraints on the assignments of rated officers in order to receive continuous flight pay. The resultant Air Force policy is that rated officers should be returned to flying positions within three years of a previous flying assignment in order to retain rated visibility. In no case would an absence from rated duties be more than five years.⁹ Therefore, the Air Force must make a concerted effort to accommodate the requirements of both the ACIA and the need for systems acquisition experience into the career patterns of a sufficient number of rated officers. Only with adequate prior planning will a qualified manpower resource be available from which to select future rated SPDs.

DEPARTMENT OF DEFENSE

Within six months of the ACIA implementation, DOD Directive 5000.23, titled "Systems Acquisition Management Careers," was signed by Deputy Secretary of Defense, William Clements. The purpose of the directive was to establish DOD policy for the selection, training and career development of personnel required for the management of major weapon systems acquisition programs.¹⁰ While there are many important aspects to this directive which impact the career development of future SPDs, only two are of primary significance for this report. The first aspect to be discussed concerns the requirement that Colonels should not be considered for assignment as SPDs unless they have had systems acquisition experience, to include one or more assignments to a program office. In addition, General officers normally should be considered for assignment as SPDs only if they had substantial prior experience in systems acquisition, to include demonstrated performance.¹¹

For rated officers, who must satisfy the ACIA requirements, the added stipulations of DOD Directive 5000.23 require detailed careering planning to ensure that the proper background and experiences are obtained in order to qualify for the limited major SPD positions. There are, however, numerous assignment sequences that would satisfy the 11 year gate of ACIA and also provide at least six years of systems acquisition experience by 18 years.¹² Therefore, the challenge

becomes one of optimum career management. The author, who was assigned to Hq AFSC for two years as Deputy Assistant for Senior Officer Matters, believes that the objective of all potential SPDs, whether rated or non-rated, should be to maximize SPO experience and obtain exposure to a variety of the systems acquisition management disciplines. The key is to make a conscious effort for diversified SPO experience.

The other major aspect of the Directive states that all major system SPD candidates should have professional education at the DSMC Program Management Course (PMC) or Executive Refresher Course, (ERC), either before or shortly following assignment to a major program office.¹³ This strong emphasis on professional training evolved during the tenure of David Packard as Deputy Secretary of Defense. As an advocate for increased training, he stated, during his address to the initial DSMC class in August 1971, that DSMC was "established for the specific purpose of making a substantial improvement in the capability and effectiveness of managers for the important development and production programs of the Department of Defense."¹⁴

The purpose of the 20-week Program Management Course is to prepare selected intermediate-level officers (Majors and Lt Colonels) for assignments in program management. Students are educated in a broad spectrum of program management activities with a close relationship being maintained between the problems encountered on current systems acquisition programs

and those provided in the classroom. The current Air Force quota is approximately 40 attendees for each class which is conducted twice a year.

For those individuals who aspire to become an SPD, PMC attendance should be a goal. However, attendance becomes a very difficult trade-off for those exceptional rated officers who are also selected to attend intermediate and/or senior service school because of the length of time associated with these unique training opportunities; particularly if their prime goal is to satisfy the 11 year gate of ACIA. Further complicating the process is the attainment of an advanced academic degree under Air Force sponsorship. The requirement exists for a directed duty assignment immediately upon graduation to a position which will capitalize upon this academic knowledge. The directed duty tour of approximately three years, when coupled with the time spent in school, imposes definite constraints on proper career development. Thus serious consideration must be given to alternative methods of obtaining advanced academic education. Several examples of career assignment patterns are presented in Appendix A to illustrate both the complexity of the problem and the need for career development planning.

An alternative for senior-level managers is to attend the Executive Refresher Course, a three week seminar. The purpose of the ERC is to review the most effective concepts and methods of program management for major weapon systems

and to examine new developments that have important implications for program managers. For those officers who achieve senior **grade** levels or SPD status without prior attendance at DSMC, immediate consideration should be given to attending the ERC.

SECTION IV

CHARACTERISTICS OF PROGRAM MANAGERS

INTRODUCTION

DOD Directive 5000.23 requires future managers of systems acquisition programs to undergo DSMC education and to have had prior experience in a SPO. The ACIA further requires rated officers to perform operational flying duties in order to qualify for financial compensation. To obtain the proper perspective as to the impact of these policy decisions, the career characteristics of the current Air Force major systems acquisition managers are now presented.

SOURCE OF DATA

The data presented were extracted from official command officer records maintained by the Assistant for Senior Officer Matters, Hq AFSC. These records provide a complete history, including aeronautical rating, academic education, professional military education, and systems acquisition and operational experience. Specifically, the records of 35 officers assigned as SPDs were reviewed in the course of this analysis.

Encompassed in the review are all SPDs who occupy positions which require the specific assignment approval of the Commander, AFSC. These positions constitute the largest and most important acquisition programs in the Air Force. This

study represents the first independent comprehensive analysis of the career characteristics of these major SPDs which includes officers assigned to the three AFSC systems acquisition subcommands: Aeronautical Systems Division (ASD), Electronics Systems Division (ESD) and Space and Missile Systems Organization (SAMSO).

DATA ANALYSIS

Military Grade Level. The military grade profile for the 35 SPDs and the subcommand to which they are assigned is shown in Table 1. There is nearly an equal distribution of major system acquisition programs between the three product divisions.

TABLE 1. MILITARY GRADE LEVEL

	<u>ORGANIZATION</u>			
	<u>ASD</u>	<u>ESD</u>	<u>SAMSO</u>	<u>TOTAL</u>
Major General	2	1	0	3
Brigadier General	2	1	1	4
Colonel	<u>8</u>	<u>9</u>	<u>11</u>	<u>28</u>
Total	12	11	12	35

Aeronautical Rating. A key discriminator among Air Force personnel is their aeronautical rating. Table 2 indicates the aeronautical rating for the 35 SPDs. ASD, dealing with aeronautical systems acquisition programs has a higher percentage of rated officers.

TABLE 2. AERONAUTICAL RATING VS ORGANIZATION

	<u>ORGANIZATION</u>				
	<u>ASD</u>	<u>ESD</u>	<u>SAMSO</u>	<u>TOTAL</u>	<u>PERCENT</u>
Pilot	10	6	3	19	54
Navigator	1	1	2	4	12
Non-Rated	<u>1</u>	<u>4</u>	<u>7</u>	<u>12</u>	34
Total	12	11	12	35	

The aeronautical rating of these major SPDs vs their respective military grade is presented in Table 3.

TABLE 3. MILITARY GRADE VS AERONAUTICAL RATING

	<u>AERONAUTICAL RATING</u>			
	<u>PILOT</u>	<u>NAVIGATOR</u>	<u>NON-RATED</u>	<u>TOTAL</u>
Major General	3	0	0	3
Brigadier General	2	1	1	4
Colonel	<u>14</u>	<u>3</u>	<u>11</u>	<u>28</u>
Total	19	4	12	35

For comparison purposes, the aeronautical rating profile for the 518 line officer Colonels currently assigned to AFSC is 57% pilots, 17% navigators, 9% suspended and 27% non-rated.

Academic Education. All 35 SPDs have at least a baccalaureate degree and all obtained their undergraduate degree in either science or engineering. 91% have a masters degree. Over one-third (12 of 35) have a masters degree in management which shows a definite trend towards management. Two-thirds (23 of 35) possess a masters degree in technical disciplines with three officers having both a technical and management

masters degree. Further, five officers also have a PHD degree in a technical discipline. A summary of the academic education of the SPDs is presented in Table 4.

TABLE 4. ACADEMIC EDUCATION

	<u>ORGANIZATION</u>				
	<u>ASD</u>	<u>ESD</u>	<u>SAMSO</u>	<u>TOTAL</u>	<u>PERCENT</u>
Baccalaureate	12	11	12	35	100
Masters	9	11	12	32	91
PHD	1	2	2	5	14

Of interest are the SPDs who possess the desirable combination of technical and management academic degrees. In all, 33 percent had this dual combination which permits technical communication with engineers while emphasizing the business management aspects of their current positions.

Professional Military Education. Just over one-half (18 of 35) of the SPDs have attended a senior service school in residence. 77% (27 of 35) have attended at least intermediate and/or senior service school in residence.

Defense Systems Management College. There were 17 officers (48%) in this study who have completed at least one of the prime courses offered by DSMC. A summary is presented in Table 5.

TABLE 5. DSMC ATTENDANCE

	<u>ORGANIZATION</u>			
	<u>ASD</u>	<u>ESD</u>	<u>SAMSO</u>	<u>TOTAL</u>
Attended	5	7	5	17
Eligible	12	11	12	35
Percent Attended	42	64	42	48

A further breakout by course is presented in Table 6. These include the Program Management Course (PMC), Executive Refresher Course (ERC) and Industrial Financial Management (IFM) Course. The total differs from that shown in Table 5 because three individuals have attended both the ERC and IFM courses.

TABLE 6. DSMC COURSES ATTENDED

	<u>ORGANIZATION</u>			
	<u>ASD</u>	<u>ESD</u>	<u>SAMSO</u>	<u>TOTAL</u>
PMC	1	0	0	1
ERC	2	4	3	9
IFM	<u>2</u>	<u>5</u>	<u>3</u>	<u>10</u>
Total	5	9	6	20

Only one SPD is a PMC graduate. This is due to both the relative newness of DSMC (established in August 1971) and the Air Force emphasis on intermediate-level manager attendees. The current AFSC policy is to insure that all promising intermediate-level managers are identified, tracked and attend the Program Management Course. Therefore, it is expected that more PMC graduates will assume major SPD positions when they are promoted to Colonel. Table 7 indicates that attendance at the DSMC courses has been concentrated at the Colonel level.

TABLE 7. GRADE LEVEL OF ATTENDEES

	<u>COURSES</u>			
	<u>PMC</u>	<u>ERC</u>	<u>IFM</u>	<u>TOTAL</u>
Major General	0	0	0	0
Brigadier General	0	0	1	1
Colonel	<u>1</u>	<u>9</u>	<u>9</u>	<u>19</u>
Total	1	9	10	20

It has been over two years since DOD Directive 5000.23 was implemented and only 29% (10 of 35) of the SPDs have attended either the PMC or ERC in compliance with the directive. It is the author's opinion that the extensive systems acquisition experience that the Air Force provides its officers through its long established organizational and personnel management systems accounts for this low percentage rate.

Experience. Systems acquisition, operational and headquarters experience were the assignment categories considered relevant to this study. Systems acquisition refers to direct assignments in a system program office. This definition permits correlation with the DOD Directive 5000.23 requirements and the previous AFSC studies. Operational assignments provide an indication as to the accomplishment of activities related to the user environment while headquarters experience denotes involvement in the broad aspects of the higher level decision making process of either Hq USAF and/or Hq AFSC.

A breakout of the three different categories of assignment experience is shown in Table 8.

TABLE 8. ASSIGNMENT EXPERIENCE

	<u>ORGANIZATION</u>			
	<u>ASD</u>	<u>ESD</u>	<u>SAMSO</u>	<u>TOTAL</u>
Systems Acquisition	11	9	10	30
Operational	9	6	4	19
Headquarters	9	8	7	24

The 30 SPDs with systems acquisition experience averaged 5.4, 5.3 and 6.7 years prior experience in a SPO for ASD, ESD and SAMSO, respectively. With 86% having prior experience, one can conclude that there is a good correlation with the prime conclusion of the AFSC studies, i.e., to obtain SPO experience. On the other hand, 14% (5 of 35) of the SPDs had no systems acquisition experience before assuming their position as SPD - this may not be desirable. Three of the five SPDs with no prior systems acquisition experience assumed their positions subsequent to the implementation of DOD Directive 5000.23. A similar ratio (3 of 5) also exists for non-attendance at the prescribed DSMC courses stated in DOD Directive 5000.23.

Operational experience obtained by 19 SPDs was limited to the time frame since 1960. Nearly all of their operational experience was in South East Asia. Just over two-thirds of the SPDs obtained actual experience in the headquarters management arena.

Aviation Career Incentive Act. With the gate system for flight pay entitlement a reality, the SPDs with aeronautical ratings of pilot and navigator were evaluated to determine those who would have satisfied the various gates imposed by ACIA. It should be recalled that ACIA requires rated officers to be in flying positions for 9 of their first 18 years of service to receive incentive pay through 22 years or 11 of the first 18 years to receive incentive pay through 25 years. It also requires operational flying for 6 of the first 12 years to qualify for incentive pay until 18 years. A liberal interpretation of flying positions and time was taken in the analysis. The data presented in Table 9 represents an optimistic gate accomplishment rate for the 23 rated SPDs if they had been subjected to ACIA.

TABLE 9. ACIA REQUIREMENTS

	<u>GATES ACCOMPLISHED</u>				<u>TOTAL</u>
	<u>NONE</u>	<u>6 by 12</u>	<u>9 by 18</u>	<u>11 by 18</u>	
Pilot	10	3	3	3	19
Navigator	<u>1</u>	<u>2</u>	<u>0</u>	<u>1</u>	<u>4</u>
Total 11	5	3	4		23

Thus 48% (11 of 23) of the current rated SPDs failed to satisfy even the basic gate of 6 years operational flying within the first 12 years of service. However, it should be noted that several SPDs just failed to satisfy specific gates by a couple of months. Thus, had the new ACIA monitoring program been in existence, these individuals may have

achieved one gate higher than indicated above.

Further analysis of the gate accomplishment rate indicated the results shown in Table 10 for the military grade level of the 23 rated SPDs.

TABLE 10. GATES ACCOMPLISHED BY GRADE LEVEL

	<u>GATES ACCOMPLISHED</u>				<u>TOTAL</u>
	<u>NONE</u>	<u>6 by 12</u>	<u>9 by 18</u>	<u>11 by 18</u>	
Major General	1	2	0	0	3
Brigadier General	2	0	1	0	3
Colonel	<u>8</u>	<u>2</u>	<u>2</u>	<u>4</u>	<u>17</u>
Total	11	5	3	4	23

One can conclude the percentage rate of accomplishment for future SPDs will surely increase with time as the requirements of ACIA are strictly enforced by Hq USAF.

SECTION V

CONCLUSIONS & RECOMMENDATION

The primary conclusion is that the Aviation Career Incentive Act legislation and the Systems Acquisition Management Careers directive will have a profound impact on the career development process of future SPDs. Of 23 rated SPDs, nearly 50% would have failed to achieve the basic 12 year ACIA gate. In today's environment, the Air Force policy is attainment of either of the 18 year gates. Thus, future generations of SPDs will have an increase in operational flying duties and a corresponding reduction in related systems acquisition experience. This change can be counteracted to some extent by insuring the direct involvement of rated officers in systems acquisition programs rather than in the more generic research and development activities.

Further evidence of a change in future generations of SPDs is in the training received prior to becoming an SPD. While attendance at the courses prescribed in DOD Directive 5000.23 has been minimal, with less than 30% attendance, this will change. The current AFSC policy is to insure that all potential SPDs attend the Program Management Course at DSMC. This is accomplished through previously established identification and tracking procedures which were developed

to insure the proper career development of future generations of SPDs.

As in the past, officers aspiring to become an SPD will continue to realize the importance of academic education. A masters degree will be a virtual necessity and a stronger emphasis will be placed on obtaining the dual combination of technical and management degrees.

In addition, future generations will concentrate on obtaining a variety of experiences in a SPO. The ability to demonstrate an understanding of the myriad of disciplines within the program management field will be a definite attribute for the successful SPD.

To accomplish the above requires time. For future SPDs, both professional military education and training are critical. It is therefore recommended that the Air Force consider attendance at the DSMC Program Management Course as equivalent to in-residence intermediate service school. In so doing, the course should be augmented by Air University to provide specialized training which focuses on such topics as national objectives, international environment, foreign policy and the strategic/tactical employment of the U. S. Air Force. The associated instructional time could be accommodated through either a change in the PMC concept to permit electives or at the conclusion of a normal days instruction in a manner similiar to the current University of Southern California program.

APPENDIX A

ASSIGNMENT SEQUENCES

Example I

0-----FLY-----6-----SPO-----10-----FLY-----15-----SPO*-----18

11 years of flying and 7 years in a SPO.

Example II

0-----FLY-----6-----SPO-----10-----FLY-----15-----PME-----16-----SPO*-----18

11 years of flying, 6 years in a SPO and 1 year of PME.

Example III

0-----FLY-----6-----DEG-----7-----SPO-----11-----FLY-----16-----SPO*-----18

11 years of flying, 1 year for an advanced degree and 6 years in a SPO.

* Attend DSMC

BIBLIOGRAPHY

1. Air Force Systems Command, A Study on Rated Officers Assigned to Systems Acquisition Duties, April 1976, Pg. 4-1.
2. Defense Science Board, R&D Management Summer Study, September 1969, Pg. 1.
3. Packard, David, Policy Guidance on Major Weapon System Acquisition, Deputy Secretary of Defense Memo, 23 May 1970.
4. Clements, William P., Speech to the PMC Students, Defense Systems Management College, 16 October 1973.
5. Air Force Systems Command, The System Program Director of the Seventies, February 1970.
6. Air Force Systems Command, Project Ace Finding 48 - Development of Experienced Program Managers, May 1974.
7. Browning, Bob D., Who Manages Air Force Development and Acquisition Programs?, Fort Belvoir, Virginia: Defense Systems Management College, May 1974.
8. 93rd Congress of the United States of America, Public Law 93-294, Aviation Career Incentive Act, 24 May 1974.
9. Thompson, William L., private communication, September 1976.
10. DOD Directive 5000.23, Systems Acquisition Management Careers, Washington, D.C., 26 November 1974.
11. IBID, Pg. 4.
12. Miller, Craig V., The Dilemma of the Rated Program Manager Career, Fort Belvoir, Virginia: Defense Systems Management College, May 1976.
13. DOD Directive 5000.23, op cit, Pg. 3.
14. Packard, David, Speech to the PMC Students, Defense Systems Management College, August 1971.